

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspio.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|----------------------------|---------------------------------------------|----------------------|-------------------------|------------------|--|
| 09/866,938 | 05/29/2001 | Wendell P. Noble | 303.330US3 | 8033 | |
| 21186 7 | 590 08/09/2002 | | | | |
| | SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. | | | EXAMINER | |
| P.O. BOX 2938 MINNEAPOL | O. BOX 2938 IINNEAPOLIS, MN 55402 | | CHEN, JACK S J | | |
| | • | | ART UNIT | PAPER NUMBER | |
| | | | 2813 | <u></u> | |
| | | | DATE MAILED: 08/09/2002 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

lm

Office Action Summary

Application No. 09/866,938

Applicant(s)

Noble et al.

Examiner

Jack Chen

Art Unit 2813

| The MAILING DATE of this communication appears of | on the cover sheet with the correspondence address | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--|--|--|--|--|
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the | | | | | | |
| mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the If NO period for reply is specified above, the maximum statutory period will apply at Failure to reply within the set or extended period for reply will, by statute, cause the Any reply received by the Office later than three months after the mailing date of the earned patent term adjustment. See 37 CFR 1.704(b). | e application to become ABANDONED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on May 29, 2 | j | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This act | Į. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4) X Claim(s) 40, 41, and 45-69 | is/are pending in the application. | | | | | |
| 4a) Of the above, claim(s) | is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) | is/are allowed. | | | | | |
| 6) Claim(s) | is/are rejected. | | | | | |
| 7) | | | | | | |
| | are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are | a) \square accepted or b) \square objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the o | Irawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) The proposed drawing correction filed on | is: a) \square approved b) \square disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply | | | | | | |
| 12) The oath or declaration is objected to by the Exam | iner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) □ All b) □ Some* c) □ None of: | | | | | | |
| 1. Certified copies of the priority documents have | ve been received. | | | | | |
| | ve been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| *See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). | | | | | | |
| a) The translation of the foreign language provisional application has been received. | | | | | | |
| 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) Paper No(s) | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) Notice of Informal Patent Application (PTO-152) | | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). | 6) Other: | | | | | |

Application/Control Number: 09/866,938 Page 2

Art Unit: 2813

DETAILED ACTION

Election/Restriction

1. This application contains claims directed to the following patentably distinct species of the

claimed invention:

Species I, claims 40-41, 45, 58-61 drawn to a method of forming a semiconductor device

by forming the semiconductor epitaxial layer on the first source/drain layer;

Species II, claims 46-48 drawn to a method of forming a semiconductor device by using

the epitaxial layer comprising P-silicon;

Species III, claims 49-51 drawn to a method of forming a semiconductor device by

forming the first source/drain layer that comprises N+ silicon which is formed by epitaxial growth

of silicon upon the substrate;

Species IV, claims 52-54 drawn to a method of forming a semiconductor device by using

semiconductor -on-insulator;

Species V, claims 55-57 drawn to a method of forming a semiconductor device by forming

the first source/drain layer that comprises N+ silicon which is formed by ion-implantation;

Species VI, claims 62-69 drawn to a method of forming a semiconductor device by

forming second source/drain layer at a surface of an epitaxial layer.

Application/Control Number: 09/866,938 Page 3

Art Unit: 2813

2. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

- 3. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- 4. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).
- 5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Application/Control Number: 09/866,938 Page 4

Art Unit: 2813

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the

fee required under 37 CFR 1.17(I).

8. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Jack Chen whose telephone number is (703) 308-5838. The examiner can

normally be reached on Monday-Friday (alternate Monday off) from 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Olik Chaudhuri, can be reached on (703)306-2794.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)308-0956.

Jack Chen

August 7, 2002

Soulch